

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>7</sup> :

A61N 1/39, A61B 5/0456

A1

(11) International Publication Number:

WO 00/47279

(43) International Publication Date:

17 August 2000 (17.08.00)

(21) International Application Number: PCT/IB00/00205

(22) International Filing Date: 8 February 2000 (08.02.00)

(30) Priority Data:

S990090

8 February 1999 (08.02.99)

IE

(71)(72) Applicants and Inventors: ALLEN, James [GB/GB]; 10 Dunadry Road, Muckamore, County Antrim BT15 45Q (GB). ANDERSON, Johnny, Houston [GB/GB]; 16 Torgrange, Holywood, County Down BT18 0NG (GB).

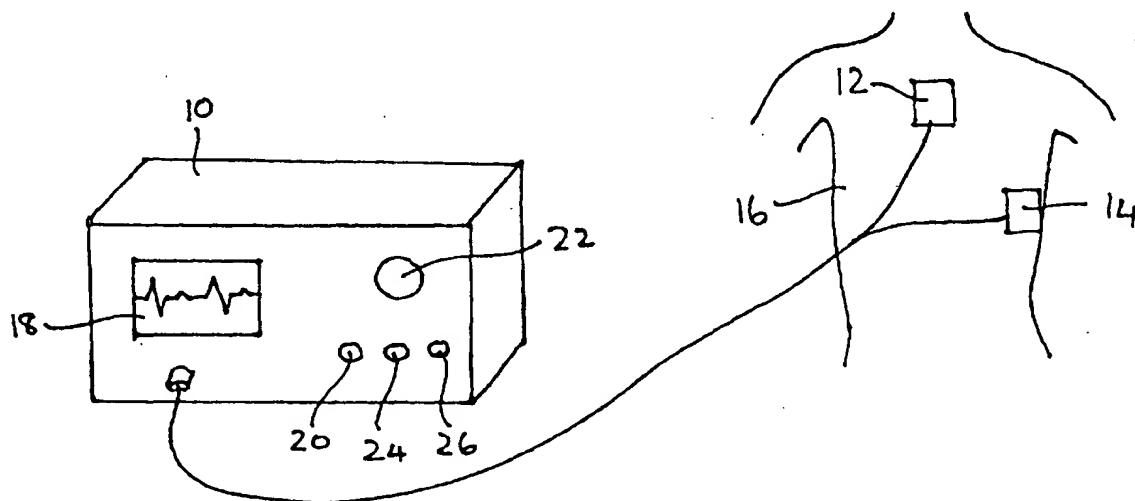
(74) Agent: CASEY, Lindsay, Joseph; F.R. Kelly &amp; Co., 27 Clyde Road, Ballsbridge, Dublin 4 (IE).

(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

## Published

*With international search report.**Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.*

(54) Title: APPARATUS FOR DETERMINING WHEN A PATIENT IS SUSCEPTIBLE TO DEFIBRILLATION



## (57) Abstract

An apparatus for determining when a patient is susceptible to defibrillation comprises a plurality of electrodes (12, 14) for obtaining an ECG signal from a patient, and data processing means (30, 42) for determining a region of the ECG signal where the signal passes from a first threshold to a second threshold at least equal in magnitude but of opposite polarity to the first threshold while the gradient of the signal remains within certain limits, detecting the next following ECG signal peak, and providing an output signal upon such detection.